

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at page 1, line 2, with the following rewritten paragraph, including the new section heading, which is not underlined or in bold type, pursuant to the Examiner's instructions:

1 CROSS-REFERENCE TO RELATED APPLICATIONS

- 2 This application claims priority under 35 USC §(e)(1) of British Application
3 Number 0021873.5 filed September 6, 2000.

Please replace the paragraph beginning at page 1, line 4, with the following rewritten paragraph, including the new section headings, which are not underlined or in bold type, pursuant to the Examiner's instructions:

1 BACKGROUND OF THE INVENTION

2 (1) Field of the Invention

- 3 The present invention relates to communications over a data network and more
4 especially to voice telephony over a conventional Ethernet network.
5

Please replace the paragraph beginning at page 1, line 7, with the following rewritten paragraph, including the new section heading, which is not underlined or in bold type, pursuant to the Examiner's instructions:

1 (2) Description of the Related Art

- 2 Voice Over Internet Protocol (VOIP) is a protocol that facilitates the use of a data
3 network for voice telephony. A VOIP telephone system can be incorporated into
4 a computer workstation but most users prefer a separate handset that is more in
5 keeping with a conventional telephone system. In order to use a separate

6 handset, the VOIP telephone and the computer workstation can share a network
7 connection, or else they will require separate network connections. Many
8 computer workstations are equipped with only one network connection and so it
9 is advantageous to provide a system in which the computer workstation and the
10 VOIP telephone can share the same network connection. Circuit modules that
11 enable more than one system to connect to a network using the same network
12 connection are known as network extender modules.

Please replace the paragraph beginning at page 2, line 14, with the following rewritten paragraph, including the new section heading, which is not underlined or in bold type, pursuant to the Examiner's instructions:

1 BRIEF SUMMARY OF THE INVENTION

2 It is an object of the present invention to provide an improved means of adding,
3 for example, a VOIP telephone connection to a conventional computer
4 workstation to data network connection using a single network connection. This
5 is accomplished by providing a module for connecting first and second data
6 sources to a network using a single network connection. In the module, a first
7 and second interface pass data to and from the network and to and from the first
8 data source, by transmitting data from the first interface means to the second
9 interface and from the second interface means to the first interface means so as
10 to allow communication between the first data source and the network when they
11 are connected to the module. A first and a second restricted interface pass data
12 to and from the second data source. The module transmits data from the first
13 restricted interface to the first interface and from the first interface to the first
14 restricted interface so as to allow communication between the second data
15 source and the network when they are connected to the module but not to
16 transmit data between the first restricted interface means and the second
17 interface means. The module also transmits data from the second restricted
18 interface to the second interface and from the second interface to the second

19 restricted interface so as to allow communication between the second data
20 source and first data source when they are connected to the module but not to
21 transmit data between the second restricted interface means and the first
22 interface means.

Please replace the paragraph beginning at page 2, line 18, with the following rewritten paragraph, including the new section heading, which is not underlined or in bold type, pursuant to the Examiner's instructions:

1 BRIEF DESCRIPTION OF THE DRAWINGS

2 An embodiment of the network extender module will now be described by way of
3 example only with reference to the accompanying drawings, of which:

Please replace the paragraph beginning at page 3, line 3, with the following rewritten paragraph, including the new section heading, which is not underlined or in bold type, pursuant to the Examiner's instructions:

1 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE
2 INVENTION

3 Figure 2 shows a configuration that provides full-duplex connections. In Figure
4 2, the repeater 4 of Figure 1 is replaced by a three-port switch 5. Each port of
5 the switch provides two connections – a line in and a line out – in order to
6 provide a full duplex connection. A switch allows data received at a port to be
7 routed in general to any other one of its ports; the internal structure of the switch
8 needed for that routing is complex and will now be described.